

Claims:

1. Transfer line comprising several stations which serve for machining workpieces, the stations being connected to each other by a conveying line on which the workpieces, respectively the workpiece carriers carrying the workpieces, are conveyed from station to station, **characterised in that** at least one of the stations is designed inherent stiff in itself and the station is equipped with an autonomously working station control which controls the working procedures of the station.
2. Transfer line according to claim 1, **characterised in that** at least one of the stations is designed as a hook machine which is premounted in the plant and can be delivered ready to run.
3. Transfer line according to claim 1, **characterised in that** each station is provided with one transfer drive each.
4. Transfer line according to claim 1, **characterised in that** one transfer drive is assigned to each station.
5. Transfer line according to claim 1, **characterised in that** the station control monitors and controls, besides special working procedures of the station, schematic-working sequences.
6. Transfer line according to claim 1, **characterised in that** the station control is designed as an intelligent station control.
7. Transfer line according to claim 1, **characterised in that** the transfer drive provides conveying of the workpiece on the conveying line.
8. Transfer line according to claim 1, **characterised in that** the workpieces are mounted on workpiece carriers.
9. Transfer line according to claim 1, **characterised in that** the transfer drives of the different stations are designed in such a way that they effect independently from each other a movement of each workpiece which has to be conveyed, respectively each workpiece carrier.
10. Transfer line according to claim 1, **characterised in that** at the station a draw-in, respectively a push-out, device is provided.

11. Transfer line according to claim 1, **characterised in that** the draw-in and push-out device serves in particular for positioning of the workpiece, respectively the workpiece carrier, in the station.
12. Transfer line according to claim 1, **characterised in that** slide strips are provided for the support of the workpiece carrier.
13. Transfer line according to claim 1, **characterised in that** the draw-in, respectively push-out, device also serves as transfer drive.
14. Transfer line according to claim 1, **characterised in that** the conveying line which connects two stations serves as a buffer store for workpieces, respectively workpiece carriers.
15. Transfer line according to claim 1, **characterised in that** the conveying line is connected directly to the frame of the station.
16. Transfer line according to claim 1, **characterised in that** the conveying line is equipped with driven rollers or frictional rollers or the like.
17. Transfer line according to claim 1, **characterised in that** the station control also monitors the incoming conveying line.
18. Transfer line according to claim 1, **characterised in that** the station control interrupts the machining of workpieces when finished workpieces cannot be conveyed to the outgoing conveying line.
19. Transfer line according to claim 1, **characterised in that** the station control does not feed a new workpiece which has to be machined before the station is free.
20. Transfer line according to claim 1, **characterised in that** the station control monitors that finished workpieces will be actually conveyed out.
21. Transfer line according to claim 1, **characterised in that** the station has a frame, preferably a one-part frame, which holds the machining unit and, if necessary, a workpiece slide, respectively workpiece machining table.
22. Transfer line according to claim 1, **characterised in that** the station is designed module-like and is able to function independently.

23. Transfer line according to claim 1, **characterised in that** the station is designed module-like or can be transported.
24. Transfer line according to claim 1, **characterised in that** the workpiece carriers or the workpieces have data carriers which carry information about the workpiece, respectively the machining which has to be carried out on the workpiece, and the station control receives these data from a reader which reads the data carrier.
25. Transfer line according to claim 1, **characterised in that** the station is arranged as a series machine for different uses and the adjustment for the respective machining function is given by the station control.

Patent Attorney

Title: "Transfer Line"

Summary: (without Fig.)

The invention refers to a transfer line which comprises several stations serving for the machining of workpieces, and the stations being connected to each other by a conveying line on which the workpieces, respectively the workpiece carriers carrying the workpieces, are conveyed from station to station.

The invention is characterised by the fact that at least one of the stations is designed inherently stiffly, preferably as hook machine, and the station is equipped with an autonomously working station control which controls the working processes of the station.